

In the claims:

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1. (Original) A secure electronic message redirection system, comprising:

a host system having a redirector application, wherein the redirector application is configured to sense a trigger event at the host system and in response to the trigger event to continuously redirect electronic messages from the host system to a mobile data communication device;

a wired network coupled to the host system;

a wireless data network coupled to the mobile data communication device;

a wireless gateway coupled between the wired network and the wireless data network for transmitting messages between the wired network and the wireless network; and

a secure link formed between the host system and the mobile data communication device through the wireless gateway, the secure link formed using an encryption module operating at the host system that encrypts the electronic messages prior to redirection to the mobile data communication device, and a corresponding decryption module operating at the mobile data communication device that decrypts the electronic messages that are received from the host system;

wherein the host system further includes a data compression module for compressing the electronic messages prior to redirecting the messages over the secure link through the wireless gateway, and the mobile data communication device includes a corresponding decompression module for decompressing the compressed electronic messages;

wherein the host system includes a packaging module for packaging the electronic messages into electronic envelopes prior to redirecting the messages over the secure link through the wireless gateway, and the mobile data communication device includes a corresponding unpackaging module for extracting the electronic messages from the electronic envelopes; and

wherein the electronic messages remain compressed, encrypted and packaged during redirection over the wired network, through the wireless gateway and over the wireless network to thereby establish a secure electronic message redirection system.

2. (Original) A secure electronic message redirection system, comprising:

a host system having a redirector component, wherein the redirector component is configured to sense a trigger event at the host system and in response to the trigger event to redirect electronic messages from the host system to a mobile data communication device;

a first network coupled to the host system;

a wireless data network coupled to the mobile data communication device;

a wireless gateway coupled between the first network and the wireless data network for transmitting messages between the first network and the wireless network; and

a secure link formed between the host system and the mobile data communication device through the wireless gateway, the secure link formed using an encryption module operating at the host system that encrypts the electronic messages prior to redirection to the mobile data communication device, and a decryption module operating at the mobile data communication device that decrypts the electronic messages that are received from the host system, wherein the redirected messages remain encrypted while being transmitted over the first network, the wireless network, and through the wireless gateway.

3. (Original) A secure mobile electronic communication system, comprising:

an electronic communication subsystem operating at a host system, the electronic communication subsystem having a redirector component for redirecting messages from the host system to a mobile data communication device;

a wireless communication network;

a wireless gateway system coupled between the host system and the wireless communication network;

wherein the electronic communication subsystem and the mobile data communication device are configured to establish a secure link over the wireless communication network and through the wireless gateway system using encryption and decryption modules operating at both the host system and the mobile data communication device.

4. (Original) A method of securely exchanging messages between a host system and a wireless mobile data communication device via a wireless network, comprising the steps of:

providing a wireless gateway for coupling the host system and the wireless mobile data communication device;

establishing an end-to-end, bi-directional secure link between the host system and the wireless mobile data communication device through the wireless gateway; and

exchanging messages between the host system and the wireless mobile data communication device via the secure link.

5. (Original) The method of claim 4, wherein the establishing a secure link step further comprises the steps of:

providing an encryption module at the host system for encrypting messages prior to redirection, and a corresponding decryption module at the mobile data communication device for decrypting the encrypted messages, wherein the messages remain encrypted until received at the mobile data communication device.

6. (Original) The method of claim 5, wherein the establishing a secure link step further comprises the steps of:

providing a message packaging module at the host system for packaging messages into electronic envelopes addressed using an electronic address of the mobile data communication device associated with the wireless network; and

providing a message unpackaging module at the mobile data communication device for extracting the messages from the electronic envelopes.

7. (Original) The method of claim 6, wherein the establishing a secure link step further comprises the steps of:

providing a data compression module at the host system for compressing messages prior to redirection; and

providing a data decompression module at the mobile data communication device for decompressing the compressed messages, wherein the messages remain encrypted and compressed until received at the mobile data communication device.

8. (Original) The method of claim 4, further comprising the steps of:

configuring one or more redirection events at the host system;

detecting that a redirection event has occurred at the host system and generating a redirection trigger;

receiving messages directed to a first address at the host system from a plurality of message senders;

in response to the redirection trigger, exchanging messages between the host system and the mobile data communication device by continuously redirecting the messages from the host system to the mobile data communication device via the secure link.

9. (Original) The method of claim 8, further comprising the steps of:

receiving the messages at the mobile data communication device;

generating reply messages at the mobile data communication device to be sent to the plurality of message senders and transmitting the reply messages to the host system;

receiving the reply messages at the host system and configuring address information of the reply messages such that the reply messages use the first address associated with the host system as the originating address, wherein messages generated at either the host system or the mobile data communication device share the first address; and

transmitting the reply messages from the host system to the plurality of message senders.

10. (Original) The method of claim 4, further comprising the step of:

storing information regarding the configuration of the mobile data communication device at the host system.

11. (Original) The method of claim 10, wherein the configuration information stored at the host system includes:

(A) the network address of the mobile data communication device; and

(B) an indication of the types of message attachments that the mobile data communication device can receive and process.

12. (Original) The method of claim 11, wherein the configuration information further includes:

(C) an indication of the type of mobile data communication device.

13. (Original) The method of claim 9, wherein the received messages are addressed using a sender address and a receiver address, the method further comprising the steps of:

determining whether the receiver address is associated with the mobile data communication device;

if the receiver address is associated with the mobile data communication device, then determining a network address of the mobile data communication device and repackaging the messages into electronic envelopes addressed using the receiver address and the network address of the mobile data communication device; and

after receiving the redirected messages at the mobile data communication device, extracting the messages from the electronic envelopes and displaying the messages at the mobile

data communication device using the sender address and the receiver address, so that it appears as though the mobile data communication device is the host system.

14. (Original) The method of claim 11, further comprising the steps of:

for each message to be redirected, the host system determining whether the message includes an attachment, and if so then determining the type of attachment;

accessing the stored configuration information at the host system to determine whether the mobile data communication device can receive and process attachments of the determined type; and

if so, then redirecting the attachments to the mobile data communication device, and if not, then redirecting the attachments to a device that is capable of processing the attachment.

15. (Original) The method of claim 14 wherein the type of attachment is a sound file.

16. (Original) The method of claim 8, wherein the redirection events include external events, internal events, or networked events.

17. (Original) The method of claim 16, wherein the external event is a message from the mobile data communication device to start redirection.

18. (Original) The method of claim 16, wherein the internal event is a calendar alarm.

19. (Original) The method of claim 16, wherein the internal event is a screen saver activation.

20. (Original) The method of claim 16, wherein the internal event is a keyboard timeout signal.

21. (Original) The method of claim 16, wherein the networked events include messages to begin redirection from computer systems other than the mobile data communication device, which are connected to the host system via a wired network.

Cont
22. (Original) The method of claim 4, wherein the mobile data communication device is a device selected from the group consisting of hand-held wireless paging computer, a wirelessly enabled palm-top computer, a mobile telephone with data message capabilities, and a wirelessly enabled laptop computer.

23. (Original) The method of claim 4, wherein the mobile data communication device is a device equipped to receive both voice and non-voice data messages.

24. (Original) The method of claim 8, wherein the host system includes a preferred list for limiting the redirection step to redirecting only those messages that are transmitted to the host system from a sender on the preferred list.

25. (Original) The method of claim 24, wherein a user can add and subtract senders from the preferred list.

26. (Original) The method of claim 24, wherein the preferred list is activated and deactivated at the host system.

27. (Original) The method of claim 24, wherein the preferred list is activated and deactivated by a command message transmitted from the mobile data communication device to the host system.

CA/CD 28. (Original) The method of claim 25, wherein the user can add and subtract senders from the preferred list by configuring the host system.

29. (Original) The method of claim 25, wherein the user can add and subtract senders from the preferred list by transmitting a command message from the mobile data communication device to the host system.

30-41 (Cancelled)

AD 42. (Original) A wireless mobile communications device associated with a first computer system identified by a first electronic address, wherein the first computer system includes a wireless redirector component for redirecting messages from the first computer system to the wireless mobile communications device, comprising:

a secure link module for establishing a secure link between the wireless mobile communications device and the first computer;

a receiver for receiving a redirected message from the first computer system, wherein the redirected message is received via the secure link;

a memory for storing the redirected message;

a message generator for generating a reply message to the redirected message at the mobile device using the first electronic address of the first computer system as an originating address of the reply message; and

a transmitter for transmitting the reply message to the first computer system via the secure link.

43. (Original) The method of claim 42, wherein the wireless mobile communications device is a device selected from the group consisting of hand-held wireless paging computer, a wirelessly enabled palm-top computer, a mobile telephone with data message capabilities, and a wirelessly enabled laptop computer.